SEQUENCE LISTING

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         Jung, Gunther-Gerhard

<120>   AUTOREACTIVE PEPTIDES FROM HUMAN GLUTAMIC ACID-DECARBOXYLASE
         (GAD)

<130>   2923-393

<140>   US 08/981824
<141>   1998-09-18

<150>   PCT/EP/96/03093
<151>   1996-07-15

<150>   DE/195 25 784.7
<151>   1995-07-14

<160>   43

<170>   PatentIn version 3.2

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Asp Val Asn Tyr Ala Phe Leu His Ala Thr Asp Leu Leu Pro Ala Cys
1   5   10   15

Asp Gly Glu Arg
            20

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Ser Asn Met Tyr Ala Met Met Ile Ala Arg Phe Lys Met Phe Pro Glu
1   5   10   15

Val Lys Glu Lys

1

20

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Asn Trp Glu Leu Ala Asp Gln Pro Gln Asn Leu Glu Glu Ile Leu Met
1   5   10   15

His Cys Gln Thr
            20

<210> 4
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Thr Leu Lys Tyr Ala Ile Lys Thr Gly His Pro Arg Tyr Phe Asn Gln
1   5   10   15

Leu Ser Thr Gly
            20

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Pro Arg Tyr Phe Asn Gln Leu Ser Thr Gly Leu Asp Met Val Gly Leu
1   5   10   15

Ala Ala Asp Trp
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<210> 6
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Thr Tyr Glu Ile Ala Pro Val Phe Val Leu Leu Glu Tyr Val Thr Leu
1               5                   10                  15

Lys Lys Met Arg
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<210>   7
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<400>   7

Phe Phe Arg Met Val Ile Ser Asn Pro Ala Ala Thr His Gln Asp Ile
1               5                   10                  15

Asp Phe Leu Ile
            20


<210>   8
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<400>   8

Ile Leu Ile Lys Cys Asp Glu Arg Gly Lys Met Ile Pro Ser
1               5                   10


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<400>   9

Leu Gly Ile Gly Thr Asp Ser Val Ile Leu Ile Lys Cys Asp
1               5                   10


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<400>   10

Leu Ala Phe Leu Gln Asp Val Met Asn Ile Leu Leu Gln Tyr
1               5                   10
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Tyr Asp Leu Ser Tyr Asp Thr Gly Asp Lys Ala Leu Gln Cys
1   5   10

<210> 12
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Val Ser Tyr Gln Pro Leu Gly Asp Lys Val Asn Phe Phe Arg
1   5   10

<210> 13
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Leu Ala Ala Asp Trp Leu Thr Ser Thr Ala Asn Thr Asn Met
1   5   10

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Leu Leu Tyr Gly Asp Ala Glu Lys Pro Ala Glu Ser Gly Gly
1   5   10

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Val Asn Tyr Ala Phe Leu His Ala Thr Asp Leu Leu Pro Ala
1   5   10

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<400>  16

Leu Leu Gln Tyr Val Val Lys Ser Phe Asp Arg Ser Thr Lys
1               5                   10


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<400>  17

Phe Thr Tyr Glu Ile Ala Pro Val Phe Val Leu Leu Glu Tyr
1               5                   10


<210>  18
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<400>  18

Leu Glu Tyr Val Thr Leu Lys Lys Met Arg Glu Ile Ile Gly
1               5                   10


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<400>  19

Asn Met Tyr Ala Met Met Ile Ala Arg Phe Lys Met Phe Pro
1               5                   10


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Lys Ile Trp Met His Val Asp Ala Ala Trp Gly Gly Gly Leu
1               5                   10
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Trp Gly Gly Gly Leu Leu Met Ser Arg Lys His Lys Trp Lys
1               5                   10


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<400>  22

Glu Gly Tyr Glu Met Val Phe Asp Gly Lys Pro Gln His Thr
1               5                   10


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<400>  23

Arg Tyr Phe Asn Gln Leu Ser Thr Gly Leu Asp Met Val Gly
1               5                   10


<210>  24
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Trp Leu Thr Ser Thr Ala Asn Thr Asn Met Phe Thr Tyr Glu
1               5                   10


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<400>  25

Thr Ala Asn Thr Asn Met Phe Thr Tyr Glu Ile Ala Pro Val
1               5                   10
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6

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Leu Val Ser Ala Thr Ala Gly Thr Thr Val Tyr Gly Ala Phe
1               5               10


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<212>    PRT
<213>    Homo sapiens

<400>    27

Tyr Ile Pro Pro Ser Leu Arg Thr Leu Glu Asp Asn Glu Glu
1               5               10


<210>    28
<211>    14
<212>    PRT
<213>    Homo sapiens

<400>    28

Val Ile, Ser Asn Pro Ala Ala Thr His Gln Asp Ile Asp Phe
1               5               10


<210>    29
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<213>    Homo sapiens

<400>    29

Gly Met Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser Glu His Ser
1               5               10                  15


His Phe Ser Leu Lys Lys Gly Ala Ala
                20          25


<210>    30
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<400>    30
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Glu Arg Gly Lys Met Ile Pro Ser Asp Leu Glu Arg Arg Ile Leu Glu
1               5                   10                  15


Ala Lys Gln Lys
            20


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<220>
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<223>   Xaa = an optional sequence selected from 1 to 10 of any amino
        acids

<400>   31

Xaa Pro Glu Val Lys Thr Lys Xaa
1               5


<210>   32
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<212>   PRT
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<220>
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<223>   Xaa = an optional sequence selected from 1 to 10 of any amino
        acids

<400>   32

Xaa Pro Glu Val Lys Glu Lys Xaa
1               5


<210>   33
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<212>   PRT
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<400>   33

Ser Asn Pro Ala Ala Thr His Gln Asp Ile Asp Phe Leu Ile
1               5                   10
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tgt gcc gtg aac att gct ggc gga agc caa gga aat ctc atc ttt              45
Cys Ala Val Asn Ile Ala Gly Gly Ser Gln Gly Asn Leu Ile Phe
1               5                   10                  15


<210>    35
<211>    15
<212>    PRT
<213>    Homo sapiens

<400>    35

Cys Ala Val Asn Ile Ala Gly Gly Ser Gln Gly Asn Leu Ile Phe
1               5                   10                  15


<210>    36
<211>    42
<212>    DNA
<213>    Homo sapiens


<220>
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<222>    (1)..(42)

<400>    36
tgt gca gca agg gcc atg aac aga gat gac aag atc atc ttt                   42
Cys Ala Ala Arg Ala Met Asn Arg Asp Asp Lys Ile Ile Phe
1               5                   10


<210>    37
<211>    14
<212>    PRT
<213>    Homo sapiens

<400>    37

Cys Ala Ala Arg Ala Met Asn Arg Asp Asp Lys Ile Ile Phe
1               5                   10
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<212>   DNA
<213>   Homo sapiens


<220>
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<222>   (1)..(42)

<400>   38
tgc agt gct agt gcg ggt tgg agc aat cag ccc cag cat ttt          42
Cys Ser Ala Ser Ala Gly Trp Ser Asn Gln Pro Gln His Phe
1               5                   10


<210>   39
<211>   14
<212>   PRT
<213>   Homo sapiens


<400>   39

Cys Ser Ala Ser Ala Gly Trp Ser Asn Gln Pro Gln His Phe
1               5                   10


<210>   40
<211>   48
<212>   DNA
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<220>
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<222>   (1)..(48)

<220>
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<222>   (4)..(4)
<223>   n = unknown

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tgc ncc agc agc ttg gat gcg agc ggg agc tac aat gag cag ttc ttc          48
Cys Xaa Ser Ser Leu Asp Ala Ser Gly Ser Tyr Asn Glu Gln Phe Phe
1               5                   10                  15


<210>   41
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<212>   PRT
<213>   Homo sapiens

<220>
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<222>   (2)..(2)
<223>   The 'Xaa' at location 2 stands for Thr, Ala, Pro, or Ser.

<400>   41

Cys Xaa Ser Ser Leu Asp Ala Ser Gly Ser Tyr Asn Glu Gln Phe Phe
1               5                   10                  15


<210>   42
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<212>   DNA
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<220>
<223>   PCR primer

<400>   42
cactgaagat ccatcatctg                                           20


<210>   43
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   PCR primer

<400>   43
tagaggatgg tggcagacag                                           20
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